

What is claimed is:

1. An inner supporting structure of a bellows, the structure comprising:
 - 5 guiding tracks installed in the bellows, extending along an axial direction of the bellows;
 - moving members slidably installed on the guiding tracks along the axial direction; and
 - intermediate supporting members for coupling the
 - 10 moving members and the bellows.
2. The inner supporting structure of claim 1, wherein the guiding tracks include an upper and a lower track respectively positioned at an inner upper and an inner lower
- 15 portion of the bellows so as to be adjacent to an inner surface of the bellows.
3. The inner supporting structure of claim 1, wherein the moving members include moving blocks movably installed on
- 20 the guiding tracks without being allowed to derail therefrom, respectively.
4. The inner supporting structure of claim 3, wherein each of the guiding tracks has a guiding groove portion
- 25 having an approximately C-shaped cross section, and the moving blocks are slidably installed in the guiding groove

portion.

5. The inner supporting structure of claim 3, wherein the moving members include rollers axially supported on the moving blocks so as to slide on the guiding tracks.

6. The inner supporting structure of claim 5, wherein there are provided the plural moving members that are slidable with respect to each other along the axial direction and have protruding parts capable of contacting with each other before the rollers touch each other so as to set a minimum distance between the plural moving members.

7. The inner supporting structure of claim 6, wherein the rollers are axially supported on sidewalls of the protruding parts.

8. The inner supporting structure of claim 6, wherein the rollers include a first and a second roller respectively provided at a front and a rear portion of each of the moving blocks, and the first and the second roller are alternately positioned with respect to a central line of the moving blocks extending in the axial direction; and wherein the protruding parts include a first and a second protruding part provided at a front and a rear portion of each of the moving blocks, and the first and the second protruding part

are alternately arranged with respect to the central line, the first and the second protruding part of two adjacent moving members being positioned on an opposite side with respect to the central line.

5

9. The inner supporting structure of claim 3, wherein there are provided the plural moving members that are slidable with respect to each other along the axial direction, the structure further comprising coupling members
10 coupled with the moving blocks so as to determine a maximum distance between the plural moving members.

10. The inner supporting structure of claim 9, wherein each of the guiding tracks has a guiding groove portion
15 having an approximately C-shaped cross section, and the moving blocks and the coupling members are slidably installed in the guiding groove portion.

11. The inner supporting structure of claim 9, wherein, as
20 for a first, a second and a third moving members arranged side by side, the coupling members include a first hook for determining a maximum distance between the first and the second moving member and a second hook for determining a maximum distance between the second and the third moving
25 member, wherein the first and the second hook are alternately arranged with respect to a central line of the

moving blocks extending in the axial direction.

12. A movable stage device for moving an object to be processed in a vacuum chamber or a chamber filled with
5 specified gas or liquid, the device comprising:

a linear guide provided between a first and a second sidewall in the chamber;

a movable frame that is movable along a longitudinal direction of the linear guide inserted into the movable
10 frame to pass therethrough;

a pair of bellows surrounding the linear guide between the movable frame and the first and the second sidewall, the movable frame and the pair of bellows forming an auxiliary space airtightly isolated from the other portions of the
15 chamber;

a driving member for moving the movable frame along the linear guide;

guiding tracks installed in the pair of bellows, extending along an axial direction of the pair of bellows;

20 moving members movably positioned on the guiding tracks along the axial direction; and

intermediate supporting members for connecting the moving members and the pair of bellows.

25 13. The movable stage device of claim 12, wherein the chamber is set to have a vacuum atmosphere therein, and the

auxiliary space communicates with an atmospheric atmosphere.

14. The movable stage device of claim 12, wherein the driving member is positioned at a predetermined location in
5 the pair of bellows.

15. The movable stage device of claim 13, further comprising a bendable and stretchable transfer arm unit provided on the movable frame, for handling the object to be
10 processed.

16. The movable stage device of claim 15, further comprising a transfer chamber housing forming the chamber, wherein the transfer chamber housing is connected to a
15 processing apparatus for performing a semiconductor processing on the object to be processed.